AMENDMENT OF SOLICITATION/MODI	IFICATION OF CON	ITRACT	1. CONTRACT ID CODE	1 3		
			<u> </u>			
2. AMENDMENT/MODIFICATION NO. P00007	3.EFFECTIVE DATE	4. REQUISITION/PU	JRCHASE REG. NO.	5. PROJ NO. (if applicable)		
1 00007	10 JAN 2006	6010-5688+				
6. ISSUED BY CODE	N00164	7. ADMINISTERED	BY (if other than Item 6)	CODE S1002A		
CONTRACTING OFFICER	1.00.01	DCMA ORLAND	00			
NAVSURFWARCENDIV 300 HWY 361		3555 MAGUIRE ORLANDO FL	BOULEVARD			
CRANE IN 47522-5001	1165ZS	ORLANDO FL.	32003-3799			
BUYER/SYMBOL: (b)(6) PHONE: (b)(6)	11002.0					
8. NAME AND ADDRESS OF CONTRACTOR (No.,	street. State and ZIP Co	de)	9A. AMENDMEN	T OF SOLICITATION NO.		
LITTON LASER SYSTEMS, INC						
LASER SYSTEMS			9B. DATED (SEE	ITEM 11)		
2787 SOUTH ORANGE BLOSSON	A TRAII					
ORLANDO FL 32860-9555	TIVAL		10A. MODIFICA	TION OF CONTRACT/		
	CTNI.		X ORDER NO.			
A	(b)(6)		^ N00164-03	3-C-8519		
TIN NO.	-		10B. DATED (SE	E ITEM 13)		
CAGE CODE 34860	ACILITY CODE		29 SEPT 2	003		
	M ONLY APPLIES TO A					
The above numbered solicitation is amended a not extended.			<u> </u>			
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing items 8 and 15, and returning copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified. 12. ACCOUNTING AND APPROPRIATION DATA (If required) A3 9730300 8CPG 253 SASST 0 06842 2D 000000 SW0060000000 Document Number N0002403WX31160 13. THIS ITEM APPLIES ONLY TO MODIFICATIONS AND CONTRACTS/ORDERS,						
E. IMPORTANT: Contractor () is not, (x) is re-	nuired to sign this docum	sent and return 1	copies to the issuing of			
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organization This is a firm fixed price supply contract.)	by UCF section headings, include	ing solicitation/contract subject (matter where feasible.)			
CLIN 0001AC, invokes the requirement						
forth in revised Statement of Work here						
herein. The total contract price remain	s unchanged at \$2°	1,985.000.00				
	•					
Except as provided herein, all terms and conditions referenced in Item	n 9A and 10A, as heretofore char	nged, remains unchanged and i 16A. NAME AND TITLE OF C		o or ariet)		
15A NAME AND TITLE OF SIGNER (Type or print) (b)(6) MANAGER OF CONTRACTS	<u>.</u>	(b)(6)	CONTRACTING	OFFICER		
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AM BY (Signature of Contracting		16C. DATE SIGNED		
(b)(6)	10 JAN 2006			10 IPM 06		
NSN 7540-01-152-8070		(b)(6	RI	D FORM 30 (REV83)		
PREVIOUS EDITION UNUSABLE				by GSA		

2001AA

2001AB

1003

0007

1007

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b)(4 TOTAL

ACH

ACH

1. SECTION "B" is changed as: REDUCE CLIN 0001AC BY(b)(4) EACH, FROM(b)(4) EACH TO(b)(4) EACH. CHANGE TO: 0001AC SOFLMAN AN/PEQ 1B (b)(4) **EACH** (b)(4) \$9,569,350.00 **REQUISITION #32058278** ACRN: A3 CHANGE CLIN 0007 TO MEET PRODUCTION STANDARDS AS SET FORTH IN ATTACHED STATEMENT OF WORK: TO INCREASE THE UNIT PRICE BY (b)(4) **CHANGE CLIN 0007** FROM \$0.00 TO (b)(4) 0007 PROTOTYPE UNIT)(4EACH (b)(4)\$32,707.58 REOUISITION # 6010-5696 ACRN: A3 ADD: **CLIN 1001** AN/PEQ-1C PRODUCTION UNITS IAW SOW HEREIN b)(4)<mark>EACH</mark> (b)(4)\$6,513,873.24 **REQUISITION # 6010-5688** ACRN: A3 **CLIN 2001** NON-RECURRING ENGINEERING ASSOCIATED \$3,383,879.00 WITH PRODUCT IMPROVEMENT **SLIN 2001AA** LOT 1 INCLUDES WBS 2.0-procurement of long lead materials, (b)(4))(LOT release of Bill of Materials, Procurement of CCA's (3), Design of 2 Flex Assemblies **REOUISITION # 6010-5699** ACRN: A3 SLIN 2001AB b)(4LOT LOT 2 INCLUDES WBS 2.0 release of final engineering, WBS 6.0 (b)(4)Tooling, and WBS 7.0 Design of Test Equipment **REQUISITION # 6010-5701** ACRN: A3 **CLIN 1003** (b)(4) BATTERY BAGS IAW SOW HEREIN b)(4<mark>EACH</mark> \$5,175.00 **REQUISITION # 6010-5703** ACRN: A3 **CLIN 1007 UPGRADE PROTOTYPES**)(4EACH (b)(4)\$65,415.18 **REQUISITION # 6010-5692** ACRN: A3 2. REQUIRED DELIVERY SCHEDULE **CLIN** OTY REQUIRED DELIVERY DATE 1001 b)(4TOTAL EACH **23 DECEMBER 2006** EACH 31 JANUARY 2007 **EACH** 28 FEBRUARY 2007 EACH 31 MARCH 2007

ON OR BEFORE 30 JUNE 2006

30 APRIL 2007

30 APRIL 2007

ON OR BEFORE 30 NOVEMBER 2006

SAME AS CLIN 1001 ABOVE

N00164-03-C-8519 P00007 PAGE 3 OF 3

3. ACCOUNTING AND APPROPRIATION DATA

REQUISITION

CLIN NUMBER(S) CONTRACT ACRN APPROPRIATION DATA

32058278 9730300 8CPG 253 SASST 0 068342 2D 000000

0001 A3 SW0060000000

1001, 2001AA,

2001AB, 1003, 9730300 8CPG 253 SASST 0 068342 2D 000000

0007, 1007 A3 SW0060000000

(b)(4)

4. SECTION "I"

ADD BY REFERENCE:

DFARS 252.211-7003 Item Identification and Valuation (JUNE 2005)

5. ATTACHMENTS:

1)STATEMENT OF WORK INCLUSIVE OF AN/PEQ-1C

- 2) PERFORMANCE SPECIFICATION PS/06/805/042
- 3) CONTRACT DATA REQUIREMENTS LISTS:

A0011 Reliability Reporting of Testing

A0012 Limited Production Readiness Review Report

A0013 Depot Support

STATEMENT OF WORK FOR SPECIAL OPERATIONS FORCES LASER MARKER (SOFLAM)

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

1.0 SCOPE. This Statement of Work (SOW) sets forth the United States Special Operations Command (USSOCOM) requirements for the procurement of a Special Operations Forces Laser Marker (SOFLAM), production version of the AN/PEQ-1B (Performance Specification PS/03/805/027) and the AN/PEQ-1C (Performance Specification PS/06/805/042.



This SOW provides for the procurement, test, system spares, configuration management (CM), and technical documentation for SOFLAM. (b)(3)

The SOFLAM Laser Marker, AN/PEQ-1B and AN/PEQ-

1C System shall consist of the following hardware configuration:

AN/PEQ-1B SOFLAM Laser Marker System

(b)(3)(2) Lens paper, NSN 6640-00-663-0832 (Drawing NNN-P-40 or SM-B-955651) (3) Cleaning compound and Material Safety Data Sheet, NSN 6850-00-392-9751 (Drawing A-A-59199 or SM-B-852137) (4)(5) (b)(3)(6)Operator's manual (7)Field carrying case for the above items

AN/PEQ-1C SOFLAM Laser Marker System

- (b)(3)(2) Lens paper, NSN 6640-00-663-0832 (Drawing NNN-P-40 or SM-B-955651) (3) Cleaning compound and Material Safety Data Sheet, NSN 6850-00-392-9751 (Drawing A-A-59199 or SM-B-852137) (5)(b)(3)(6)Operator's manual **(7)**
 - (7) Field carrying case for the above items

(8) Battery Bag

2.0 <u>LISTING OF APPLICABLE DOCUMENTS</u>. The following specifications and standards form a part of this SOW to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the latest issue of the Department of Defense Index of Specifications and Standards (DODISS) as provided from the Defense Standardization Program (DSP) World Wide Web site at http://www.dsp.dla.mil and supplement thereto.

2.1 Performance Specification

PS/03/805/027 Performance Specification, AN/PEQ-1B dtd 24 Jun 03

(Revised 03 Nov 03)

PS/06/805/042 Performance Specification, AN/PEQ-1C dtd 10 Jan 06

2.2 Military Standards

MIL-STD-129P(3) Military Marking for Shipment and Storage dtd 29 Oct 04

MIL-PRF-49506 NOT 1 Logistics Management Information dtd 19 Jan 05

MIL-STD-2073/1D(1) DOD Standard Practice for Military Packaging

dtd 10 May 02

MIL -STD-461E Requirements for the Control of Electromagnetic Interference Characteristics

of Subsystems and Equipment dtd 29 Aug 99

MIL-STD-810F Environmental Test Methods

TBD Electrical Circuit, 28 Volt DC Transient Characteristics

MIL-STD-1425A Safety Design Requirements for Military Lasers and

Associated Support Equipment

Dtd 30 Aug 91

MIL-STD-1913(1) NOT 1 Dimensioning of Accessory Mounting Rail for Small

Arms Weapons dtd 20 Apr 04

MIL-STD-13231 Marking of Electronic Items dtd 02 Nov 99

MIL-STD-130L(1) Identification Marking of U.S. Military Property dtd 20 Dec 04

2.3 Department of Defense Handbooks

MIL-HDBK-61A Configuration Management Guidance dtd 7 Feb 01

MIL-DTL-24784/4B Commercial Off-the-Shelf Equipment Manual Rgmts

Dtd 15 Feb 02

MIL-HDBK-454A General Guidelines for Electronic Equipment

dtd 03 Nov 00

(b)(3)

(b)(3)

2.4 Other Government documents, drawings, and publication.

The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

SW230-AE-MMO-010

Laser Marker (SQFLAM/USMC GLTD II) AN/PEQ-1B,

28 Aug 2003

Federal Standards

FED-STD-595B (1)

Colors Used in Government Procurement dtd 11 Jan 94

ANSI Z136.1-2000

American National Standard for Safe Use of Lasers

2.5 Non-Government Standards and Other Publications.

The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

ASQC Q9001

Quality Systems - Model for Quality Assurance In-Depth, Development, Production,

Installation and Servicing dtd 1 Aug 94

(b)(3)

- 2.6 Order of Precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document shall take precedence. Nothing in this document shall supersede applicable Federal, State, or Local Laws and regulations unless a specific exemption has been obtained.
- 2.7 Availability of DoD Documents. Government specifications, standards and handbooks are available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094. Non-Government Publications are available from the National Standards Institute, 11 West 42nd Street, New York, NY 10036.

3.0 REQUIREMENTS.

3.1 General. The Contractor shall provide production laser system in accordance with (IAW) the performance requirements contained in the Performance Specification reference in paragraph 2.1. The SOFLAM laser system shall include an Operator's/Maintenance Manual with each delivered system. The AN/PEQ-1C (b)(3)

(b)(3)

3.1.1 Contract Progress Monitoring. The Contractor shall establish a monitoring system to ensure full compliance with the contract requirements.

3.2 QUALITY.

- 3.2.1 Quality Program. The Contractor shall establish, implement, document and maintain a quality system that ensures conformance to contractual requirements and meets the requirements of ASQC Q9001, or an equivalent quality system model during performance of this contract.
- 3.2.2 Quality Conformance Inspections and Tests. The Contractor shall conduct Quality Conformance Inspections and Tests IAW the Contractor's Acceptance Test Procedures ATP71003100 and ATP71003001 that have been approved. The Government reserves the right to send a representative(s) to witness production acceptance testing. The Contractor shall notify the Government of any changes to the approved Acceptance Test Procedures. Contractor shall make available documented acceptance test results with each system upon delivery to the Government. Inspection and acceptance shall be conducted at source.
- 3.2.3 Testing. The Contractor shall make available for the Government's review, all previous and current test results concerning the performance, reliability, maintainability, availability, environmental conditions and safety of the laser system.

3.3 PROGRAM SUPPORT.

- **3.3.1** <u>Program Management.</u> The Contractor shall develop and implement an innovative management plan that clearly defines how the SOFLAM Program will be managed and controlled. The Contractor shall be responsible for overall system performance and shall define and maintain appropriate subcontract and associate contract relationships to support all necessary requirements, allocations and interface. The Contractor shall designate a single point of contact (POC) specifically charged with the responsibility for accomplishment of the performance and schedule requirements set forth by this SOW. The Government shall have access to the Contractor's facilities throughout the life of the agreement of this SOW. The POC shall be the focal point for all technical communication. Program Management shall have the requirement to informally (phone call or e-mail) report program status.
- **3.3.2** <u>Progress Reports</u>. The Contractor shall submit progress reports identifying detailed work and schedule status of ongoing work only if there are negative deviations to the established production rate set within the contract until such deviations are corrected. (CDRL A001).

3.4 RELIABILITY/MAINTAINABILITY

- 3.4.1 Failure Reporting, Analysis and Corrective Action System (FRACAS). The Contractor shall furnish a Failed Item Analysis Report for each failed item occurring under this contract during Acceptance Testing or Warranty Returns (i.e., Quality Deficiency Reports (QDRs), (DR), etc.). Contractor format and content is acceptable. The Contractor shall have an established closed loop failure reporting system, procedures for analysis of failures to determine cause, and documentation for recording procedures for analysis of failures to determine cause, and documentation for recording corrective action taken. The Contractor shall have a mechanism in place for feedback of field product performance, problems, failures, and shall implement a cause and corrective action system. The Contractor's existing data collection, analysis, reporting and corrective action system shall be isolated to the lowest replaceable assembly (LRU). The field failure reporting and corrective action system shall identify failures, prioritize failure trends, analyze failure modes and causes, and track solution effectiveness. The Contractor shall provide a Failure Summary Analysis Report for each system repaired or replaced under warranty. (CDRL A002).
- **3.4.2** <u>Performance.</u> The Contractor shall notify the Government of any and all performance related data that would both positively and negatively impact the reliability, maintainability, availability and/or supportability of the SOFLAM laser system. The Government may test, validate, verify and/or certify any and all of the Systems performance parameters to verify compliance with the AN/PEQ-1C Performance Specifications other than those specifications or performance requirements not previously identified or contained in the AN/PEQ-1B specification PS/03/805/027, dated 03 November 2003.
- 3.4.3 Reporting. The Contractor shall provide a reliability report on all testing in accordance with environmental requirements 3.7 to achieve reliability of 3.6.1 of the performance specification. (CDRL A011). In addition a Pre-Lazing Analysis for on the AN/PEQ-1C will be included in the report.

3.5 CONFIGURATION MANAGEMENT (CM).

Maintain a Configuration Management (CM) program IAW the Government approved CM plan for the Special Operations Forces Laser Marker (SOFLAM) that includes an organizational structure with configuration control methods and audits for the duration of this contract. The Contractor shall have an established, Government verifiable, CM Program with control systems in place for the contract life. The Contractor's CM program shall be under the general guidance of MIL-HDBK-61A and shall provide configuration identification, configuration control, configuration status accounting, of all new and/or modified hardware, firmware, software, and documentation. The Program shall address the Contractor's procedures for CM; configuration reviews; and preparation, review and processing of Requests for Deviations and Waivers and Engineering Changes. The Production Baseline (PBL) shall be established after first delivery. The PBL shall support interchangeability and interoperability to the replaceable part level. All baselines shall be documented in the Contractor's configuration status accounting database. The Contractor shall provide drawings as required, whenever a configuration change causes change or revision to the PBL drawings. The latest revision of drawings shall be submitted to the Government throughout the life of the contract (CDRL A003). The Contractor shall host a Limited Production Readiness Review by 30 November 2006 to demonstrate that the AN/PEQ-1C SOFLAM Laser Marker CLASS I ECP is under Configuration Management Control. Demonstration will be limited to reporting of document control of new drawings, procedures, and test equipment control for the new product and will be summarize in single report or presentation. Deliverable will be the final CLASS I ECP document for signature (CDRL A012).

3.5.1 <u>Configuration Identification (CI).</u> The Functional Baseline and Product Baseline shall identify the hardware configuration of the Laser Marker. The Functional Baseline is defined by the system specification. The Engineering

Drawings, Associated Parts List, and Engineering and Logistics Life Cycle Documentation define the PBL. Labels for the AN/PEQ-1C shall comply with MIL-STD-130L in accordance with 3.5.4.1 of the performance specification.

- **3.5.2** Configuration Control (CC). The hardware PBL shall be controlled by Form, Fit, Function, Interchangeability and Interoperability in consonance with the Government Maintenance Concept of organizational to Depot repairs. The Contractor shall submit for Government approval, all proposed changes that impact the Form, Fit, Function, Interchangeability or Interoperability of the current system configuration in accordance with the Contract Data Requirements Lists.
- 3.5.2.1 Engineering Change Proposal (ECP). The Contractor shall prepare an Engineering Change Proposal (ECP), under the general guidance of MIL-HDBK-61A, for any changes to the approved Functional Baseline and/or Product Baseline. Class I and/or Class II ECP definitions shall be interpreted as defined in MIL-HDBK-61A. Class I ECPs shall require at a minimum a Revision or Part Number change to the Laser Marker dependent upon system impact to form, fit, function or cost. The Government shall dictate to the Contractor whether a Part Number or Revision to the Laser Marker is required for Class I ECPs. Any requests for Deviations, Waivers, and Notice of Revision (NOR) shall be submitted through the Contracting Officer for Government review and approval. Drawing updates for Revisions and/or Part Number changes shall be completed at the Contractor's expense to include all technical documentation required by the Government. The Contractor shall provide ECPs via electronic mail and hard copy for Government review and approval. (CDRL A004, A005, A006, A007)
- **3.5.2.2** Non-Class I Changes. For those changes not affecting form, fit, or function (i.e. parts substitution, changes not impacting contract/delivery schedule, or cost, etc.), the Contractor shall document implementation of Class II ECPs with change to revision letter of the part number by the Configuration Status Accounting database outlined in paragraph 3.5.3 for Government record. The Contractor shall provide Class II ECPs to the Government for concurrence of Classification assigned affecting the top-level system drawing. (CDRL A004)
- **3.5.3** Configuration Status Accounting (CSA). A CSA database will be proposed by the Contractor and approved by the Government. All baselines, ECPs, deviations and waivers shall be documented in the Contractor's CSA database. The Government will utilize the Contractor's CSA database as the single tracking system for each configured hardware and software item for the Laser Marker. The Contractor shall provide the Government the CSA database via electronic media. (CDRL A008)
- **3.6 INTEGRATED LOGISTICS SUPPORT (ILS).** This Section outlines the Government's ILS requirements for the SOFLAM Program. These requirements include, but are not limited to, Maintenance Planning and execution, Technical Manuals, Training, and warranty.
- 3.6.1 Contractor Logistics Support (CLS). The Contractor shall provide Life Cycle Support for the SOFLAM program for a period of five (5) years from date of contract award to include spare parts as required on individual delivery order. The Contractor shall provide a standard commercial warranty on the SOFLAM program for parts and labor for each System; the Contractor shall provide Original Equipment Manufacturer (OEM) level repairs and service under that warranty program.
- 3.6.2 <u>Warranty.</u> The Contractor shall provide a standard commercial warranty on the SOFLAM program, covering any damage or degradation of performance due to manufacturing or failures associated with normal use. The Contractor will be responsible for the cost associated with shipping and handling of warranty returns (CONUS and OCONUS) from the Contractor to NSWC Crane. Warranty repair turn around time shall not exceed 60 calendar days after receipt of the failed SOFLAM system. All failures returned to the OEM for repair will have a Return Material Authorization (RMA) number assigned by the Contractor. The Contractor shall perform inspection and failure analysis on all returned Laser Marker returned for warranty repair. This SOW requires the Contractor maintain SOFLAM spares, repair parts, and subassemblies necessary to meet the required repair turnaround time (TAT) and support the quantity of SOFLAM systems for the performance period under the terms of this contract.
- **3.6.2.1** The Contractor shall be required to restore the repaired SOFLAM system to a like new cosmetic condition. Any damage to protective finishes shall be repaired to the extent necessary to provide adequate protection during field usage, corrosion prevention and structural integrity. The Contractor shall be required to replace all damaged markings, identifications, and decals when the markings, identifications, or decals become unreadable.
- **3.6.2.2** The Contractor shall ensure all repaired, upgraded, or modified SOFLAM system meet or exceed the original performance specifications. Scratches, delaminating or other optical flaws on the optics will be replaced only if it degrades system's performance or may deteriorate to degrade system's performance.
- **3.6.2.3** After the repaired SOFLAM system passes acceptance testing at the Contractor's facility, the Contractor shall ship the repaired System to NSWC Crane for inspection and forwarding to the designated User.

3.6.2.4 The Contractor shall ensure that each repaired and serviceable SOFLAM system is packaged IAW best commercial practices.

3.6.3 TECHNICAL DATA.

3.6.3.1 Operators/Maintenance Technical Manual. The Contractor shall provide a Commercial Off-the-Shelf (COTS) Operator's and Maintenance Manual using MIL-DTL-24784/4B as guidance. The Government will review the commercial manuals using guidance in MIL-DTL-24784/4B. The Operators Manual at a minimum shall include introduction, Warnings, Cautions, and Notes, Safety, Preparation for use and installation, Principles of Operation, Maintenance and Servicing Instructions (preventive and corrective), Preparation for Shipment, Parts List, Operational and Maintenance Illustrations, and information on the functionality of the Laser Marker, its components/accessories, system operation from turn-on to system shut down including adjustments, and operator checks and services. The Technical Manual shall be no larger than 5.5 X 7 inches.

The Contractor shall provide unit/organizational level Operator and Maintenance manuals with each delivered SOFLAM system IAW with the guiding Performance Specification (AN/PEQ-1B or AN/PEQ-1C) and any restrictions imposed by the Laser Safety Release Letter. A Technical Manual start of work meeting shall be held concurrent with the post award conference to ensure all requirements are reviewed and agreed upon. The Operator and Maintenance Manual shall be provided IAW (CDRL A009).

3.6.3.2 Data Validation. The Contractor shall have a process in place that provides for the validation of the adequacy and technical accuracy of the Technical Manual. The Government will verify and approve the accuracy and completeness of the Technical Manual provided by the Contractor. Any discrepancies shall be corrected by the Contractor at no additional expense to the Government.

3.6.4 SUPPLY SUPPORT.

- 3.6.4.1 Proposed Spare Parts List for Spares Acquisition Integrated with Production (SAIP). The Contractor shall employ the concept of concurrent release of spare orders with identical parts as installments on the production unit. The Contractor shall provide a complete proposed spare parts listing of all the parts that identifies the SOFLAM system, which can be removed and replaced at the Organizational Level and repaired at Depot Level IAW (CDRL A010). The Contractor shall identify which Proposed Spare Parts are repairable at O-level and which are repairable at D-level. The Proposed Spare Parts list shall be delivered in a top-down breakdown format of the SOFLAM system and shall include repairable, replacement parts (consumables) and long lead time items. Each item on the Proposed Spare Parts List shall be priced and available for ordering. The Proposed Spare Parts List shall contain the part number, nomenclature, CAGE, Quantity, commonality to AN/PEQ-1A, and unit price. The Proposed Spare Parts List shall include the spares based upon failure analysis to support a 10 percent / per year failure philosophy.
- 3.6.5 <u>Packaging, Handling, Storage and Transportation.</u> The Laser Marker System is classified as Controlled Item Inventory Codes (CIIC) VII. Packing shall be IAW MIL-STD-2073/1D(1), Level A marking shall be IAW MIL-STD-129P, and shipping shall be IAW Attachment 1. Units shall be shipped to:

(b)(6) Bldg. 3291 NSWC Crane 300 HWY 361 Crane, IN 47522

The Contractor shall ensure that when the SOFLAM system is packaged in its field or shipping case, it is capable of being transported on standard transportation system, commercial or military. The Contractor shall also ensure when the SOFLAM system is in its shipping container, it shall withstand, without physical damage or degradation of performance, transportation modes of commercial air, truck, and all types of Army/Navy cargo or combat vehicles as well as Naval fast Boats and Submersible Diving Vehicles (SDVs).

Labeling and marking requirements shall be IAW MIL-STD-129P.

3.6.6 Safety.

3.6.6.1 Environmental and HAZMAT. The Contractor shall have an established Environmental and HAZMAT program to ensure the system design, development, testing, evaluation, operations, and maintenance comply with federal, state, and local environmental laws, regulations, shipping regulations, policies, treaties, and agreements. The Contractor shall perform a

comprehensive Environmental, Safety and Health (ESH) analyses and provide, if requested, an Environmental Safety and Health Plan addressing Environmental Safety Hazards, Support requirements associated with using hazardous materials, and Cost effective pollution prevention programs. The contractor shall identify any hazards containing within the product delivered (i.e. Material Safety Data Sheets) required for establishing the program.

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing deta sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Sulte 1204, Arlington, VA. 22202-4302, and to the Office of Management and Budget, Paparwork Reduction 1889, Washington, DC 20503, Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for Contract/PR No. listed in Block E.

A. CONTRACT LINE	ITEM NO.	B. EXH	ивіт	C. CATEGORY: TDP TM OTHE	R X				
D. SYSTEM/ITEM LASER MARK	ED (SOEL AM)		E. CONTR	L RACT/PR NO.	F. CONTRACTOR				
1. DATA ITEM NO.	2. TITLE OF DATA Reliability Rep		of Testing		3. SUBTITLE				
A011	Acquisition Document No		5 CONTRAC	T REFERENCE	6. REQUIRING OFFICE				
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BLK 14 - Submit format via email		n Micro	soft Word/	EXCEL document					
Addressee List:	(AL-01)								
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17. PRICE GROUP

18. ESTIMATED TOTAL PRICE

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SECT. B

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)

Form Approved OMB No. 0704-0188

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17. PRICE GROUP

18. ESTIMATED TOTAL PRICE

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SECT. B

NIGHT VISION/CHEMICAL AND BIOLOGICAL SENSORS DEPARTMENT

Code 805

Performance Specification
For
AN/PEQ-1C Special Operations Forces Laser Marker (SOFLAM)

PS/06/805/042



January 10, 2006

NAVAL SURFACE WARFARE CENTER CRANE DIVISION NIGHT VISION/CHEMICAL AND BIOLOGICAL SENSORS (CODE 805) CRANE DIVISION CRANE, IN 47522-5001

CODE 805 INTERNAL REVIEW SHEET FOR NIGHT VISION AND ELECTRO-OPTICS DEPARTMENT

PREPARED BY:	
	Date
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REVIEWED BY:	
(b)(6)	
APPROVED BY:	D -1-
(b)(6)	Date

RECORD OF CHANGES AND REVISIONS

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1. SCOPE

This specification establishes the United States Special Operations Command (USSOCOM) performance requirements for the AN/PEQ-1C Special Operations Forces Laser Marker (SOFLAM). The AN/PEQ-1C (b)(3)

(b)(3)

2. APPLICABLE DOCUMENTS

2.1. General.

The following specifications and standards form a part of this Performance Specification to the extent specified herein. Unless otherwise specified, the issues of these documents shall be those listed in the Department of Defense Index of Specifications and Standards (DODISS) as provided from the Defense Standardization Program (DSP) World Wide Web site at http://www.dsp.dla.mil.

2.2. Government documents.

2.2.1. Specifications, standards, and handbooks.

MIL-STD-461E

The following specifications, standards, and handbooks form a part of this document to the extent specified herein.

Electromagnetic Interference

Standards

MIL-STD-810F	Environmental Test Methods
MIL-HDBK-454A	General Guidelines for Electronic Equipment
	(b)(3)
TBD (joint created doc)	Electrical Circuit, 28 Volt DC Transient Characteristics
MIL-STD-1425A	Safety Design Requirements for Military Lasers and Associated Support Equipment
MIL-STD-1472F	DOD Design Criteria Standard - Human Engineering
MIL-STD-1913 (Notice 1)	Dimensioning of Accessory Mounting Rail for Small Arms Weapons
MIL-STD-13231	Marking of Electronic Items
MIL-STD-130L	Identification Marking of U.S. Military Property

2.2.2. Other Government documents, drawings, and publication.

The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation

Federal Standards

FED-STD-595B

Colors Used in Government Procurement

ANSI Z136.1-2000

American National Standard for Safe Use of Lasers

2.2.3. Non-Government Publications.

The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.



2.3. Order of Precedence.

In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. Requirements

3.1. Description.



3.2. Major Components.

The AN/PEQ-1C system shall consist of the components outlined in this section as a minimum.

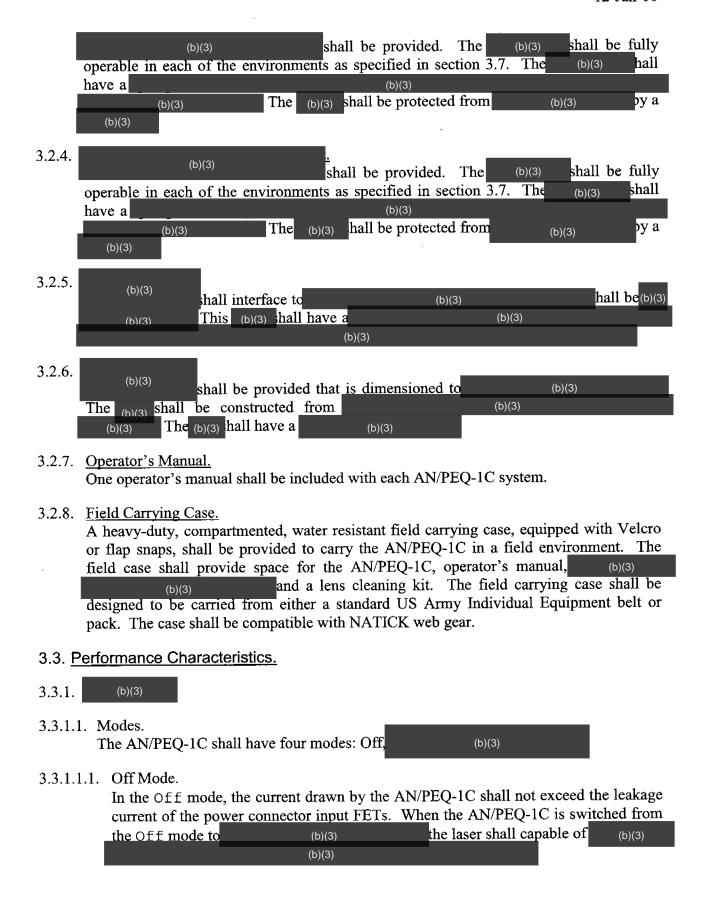
3.2.1. Laser Marker.

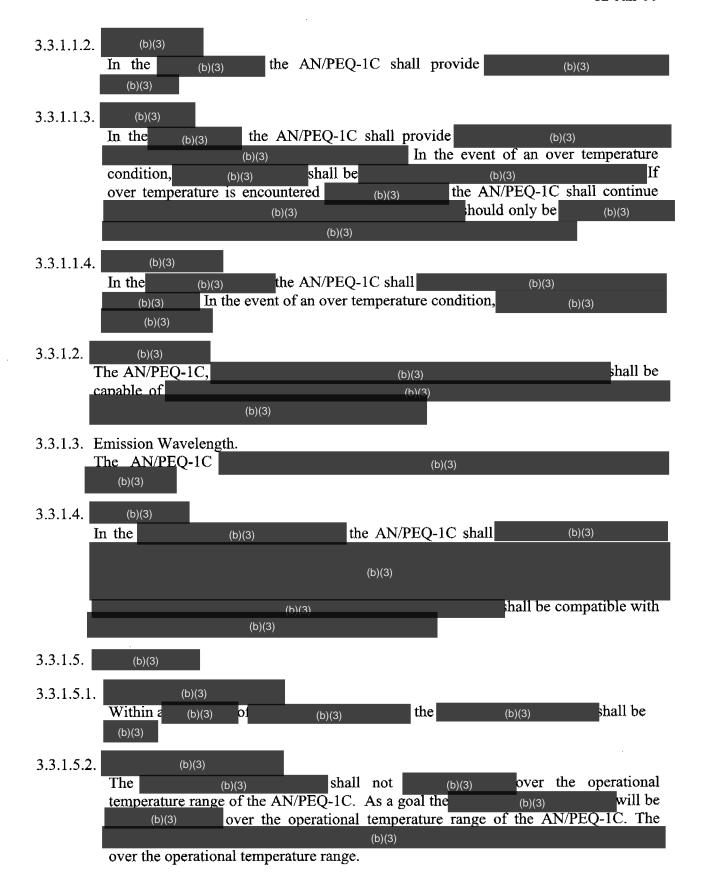
An integrated laser designator and laser marker shall be provided that meets all of the requirements of this specification.

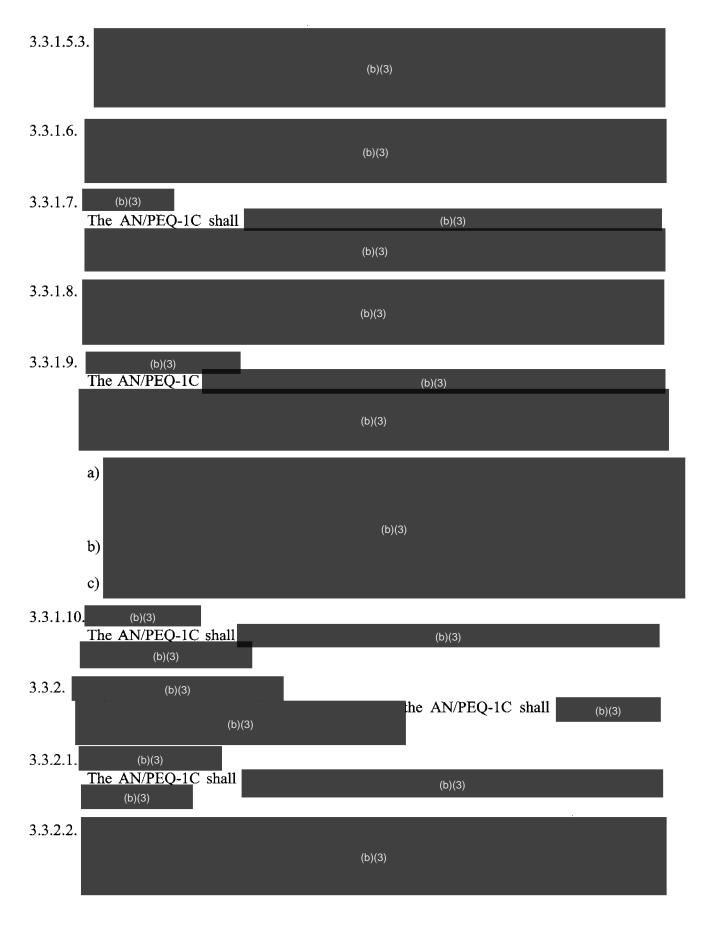
3.2.2. Lens Cleaning Kit.

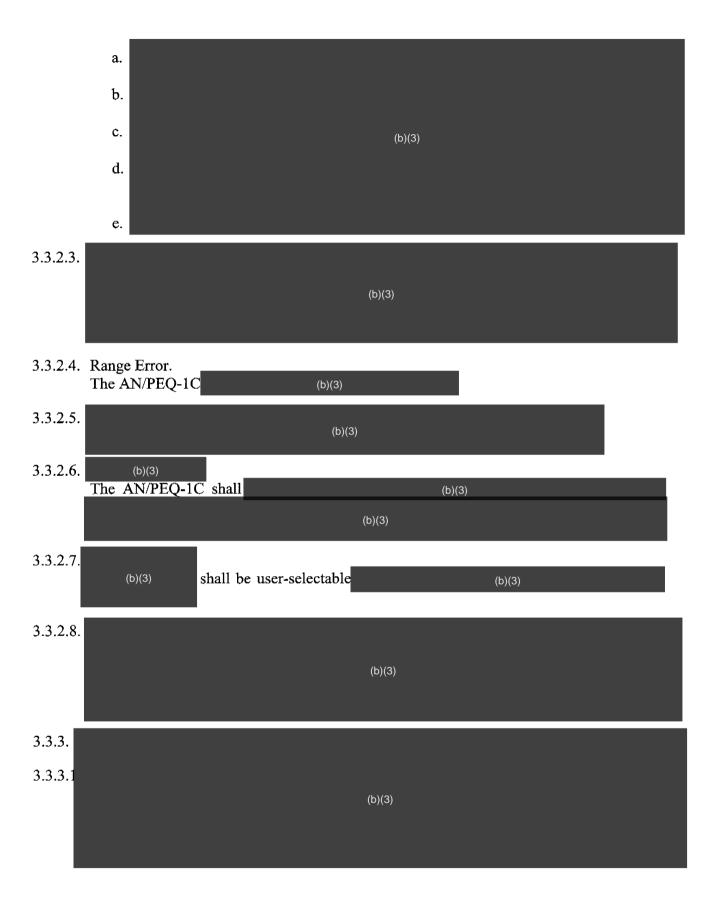
A lens cleaning kit shall be provided that shall consist of one package of lens cleaning tissue and a 2 ounce plastic dropper bottle of lens cleaning compound.

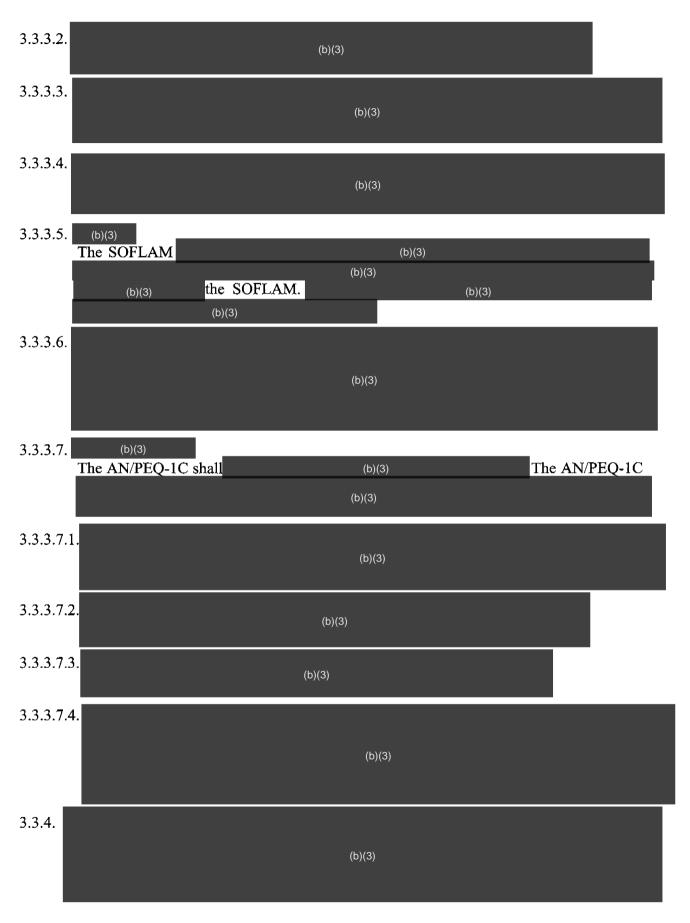
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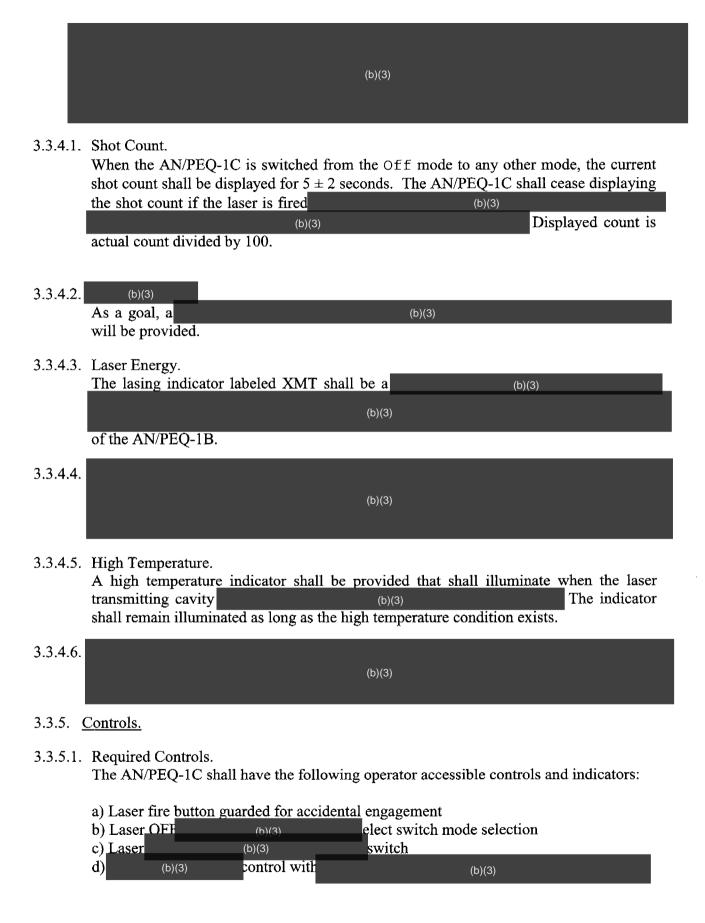












e) Laser (b)(3)

3.3.5.2. Control Illumination.

All controls shall not emit external lighting.

3.4. Interfaces.

3.4.1. Mechanical Interface.

3.4.1.1. Tripod Interface.

Each AN/PEQ-1C shall have one ½-20 UNC threaded hole located near the center of gravity. The AN/PEQ-1C tripod interface shall be backward compatible with the AN/PEQ-1B Groundhog tripod.

3.4.1.2. Rails.

The AN/PEQ-1C shall have (b)(3) Picatinny rails mounted to the top of the unit for mounting (b)(3) and other fielded hardware as applicable.

3.4.2. Electrical Interface.

3.4.2.1. Power.

3.4.2.1.1. Input Voltage.

The AN/PEO-1C shall not be damaged and shall have full performance when supplied

(b)(3)

3.4.2.1.2. Power Sources.

The laser marker shall be capable of operating without damage or degradation over all environments (goal with deviations approved) specified within this document when power is provided (b)(3)



d. (b)(3)3.4.2.1.3. Input current. When operating at (b)(3)(b)(3)and IAW the specified in this document, the AN/PEQ-1C (b)(3)Over the full operational (b)(3)temperature range specified in this document, (b)(3)and IAW the pecified in this document, the (b)(3) (b)(3)AN/PEO-1C (b)(3)(b)(3)3.4.2.2. (b)(3)The AN/PEO-1C shall be as defined in (b)(3)(b)(3)3.4.2.3. System Programming Connector. A In System Programming connector shall be provided to allow programming or reprogramming of any part in the internal In System Programming chain. 3.4.2.4. (b)(3)The AN/PEO-1C shall include an ontion for the capability to (b)(3)(b)(3)(b)(3)3.5. Physical Characteristics. 3.5.1. Weight. The AN/PEQ-1C shall weigh maximum (Threshold). As an objective the (b)(3) AN/PEQ-1C shall weigh no more than (b)(3) 3.5.2. Dimensions. (all in inches). AN/PEQ-1C dimensions shall not exceed

3.5.3. Color and Finish.

The exterior color and finish of the AN/PEQ-1C system shall be in accordance with FED-STD-595B, color FS 30324. Exterior surfaces must be subdued and non-reflective.

3	5	.4.	La	b	els.
~					ULU.

- 3.5.4.1. Each AN/PEQ-1C shall be marked with a Unique Identification (UID) label. This label shall comply with Construct 2 as detailed in MIL-STD-130L. It shall as a minimum list the cage code, original part number, and serial number of each AN/PEQ-1C.
- 3.5.4.2. All exterior labels shall be of a subdued, anti-reflective style.
- 3.5.5. Buttons/Knobs.

All buttons (including the fire button) and knobs shall be black and subdued.

- 3.6. Support Requirements.
- 3.6.1. Reliability.

The AN/PEQ-1C shall have a mean time between failures (MTBF) of (b)(3)

- 3.6.2. Maintainability.
- 3.6.2.1. Shot Counter.

The AN/PEQ-1C shall contain a shot counter that will advance one count for every pulse fired. The shot counter shall be capable of counting all laser pulses, including those determined as missed pulses, over the estimated life of the laser transmitter.

3.6.2.2. Radioactive materials.

No radioactive materials shall be used.

- 3.7. Environmental Requirements.
- 3.7.1. Temperature.
- 3.7.1.1. Operating Temperature.

The AN/PEQ-1C shall operate without damage or degradation during exposure to temperatures ranging from (b)(3)

3.7.1.2. Storage Temperature.

The AN/PEQ-1C shall operate without damage or degradation following storage at temperatures ranging from (b)(3)

3.7.1.3. Temperature/Altitude.

The AN/PEQ-1C shall operate without damage or degradation during exposure up to (b)(3) and following exposure at (b)(3)

3.7.2. Shock and Vibration.

3.7.2.1. Bench Handling.

The AN/PEQ-1C shall operate without damage or degradation after test in accordance with MIL-STD-810F, Method 516.5, Procedure VI.

3.7.2.2. Transportation Vibration (Loose Cargo).

The AN/PEQ-1C shall operate without damage or degradation following exposure to transportation vibration in accordance with MIL-STD-810F, Method 514.5, Procedure II, Category 3, with a total test time of three hours.

3.7.2.3. Mechanical Vibration.

The AN/PEQ-1C shall operate without damage or degradation following vibration exposure in accordance with MIL-STD-810C, Method 514.2, Procedure X, Table 514.2-VII, Figure 514.2-7, (b)(3) All equipment shall be non-operating during exposure.

3.7.3. Humidity.

The AN/PEQ-1C shall operate without damage or degradation after exposure for 48 hours to humidity of (b)(3) Equipment shall be non-operating during humidity exposure, and optical surfaces and connectors are to be covered.

3.7.4. Salt Fog.

The AN/PEQ-1C shall operate without leakage, damage or degradation after exposure to a salt fog environment as specified in MIL-STD-810F Method 509.4. The AN/PEQ-1C shall be exposed for (b)(3)

(b)(3) Optical surfaces and connectors are to be covered. Equipment shall be non-operating during exposure.

3.7.5. Dust (Fine Sand).

The AN/PEQ-1C shall operate without damage or degradation after exposure to blowing dust as specified in MIL-STD-810F Method 510.4 Procedure I. The duration for steps 3 and 7 shall be (b)(3) and the air velocity shall be (b)(3) Optical surfaces and connectors are to be covered. A degraded finish is permissible with the exception that markings must still be legible.

3.7.6. Immersion Resistance.

The AN/PEQ-1C shall be capable of operating without damage, moisture intrusion or degradation to performance following exposure to a salt-water depth of (b)(3) using salt water using MIL-STD-810F Method 512.4 as a guide.

3.8. EMI.

3.8.1. Emissions.

In the operational configuration, the AN/PEQ-1C shall be characterized for the emission requirement RE102 of MIL-STD-461E.

3.8.2. Susceptibility.

In the operational configuration, the AN/PEQ-1C shall be characterized for the susceptibility requirement RS103 of MIL-STD-461E.